

# **US-10 Business Route Buttles Street Road Diet Traffic Data Update**

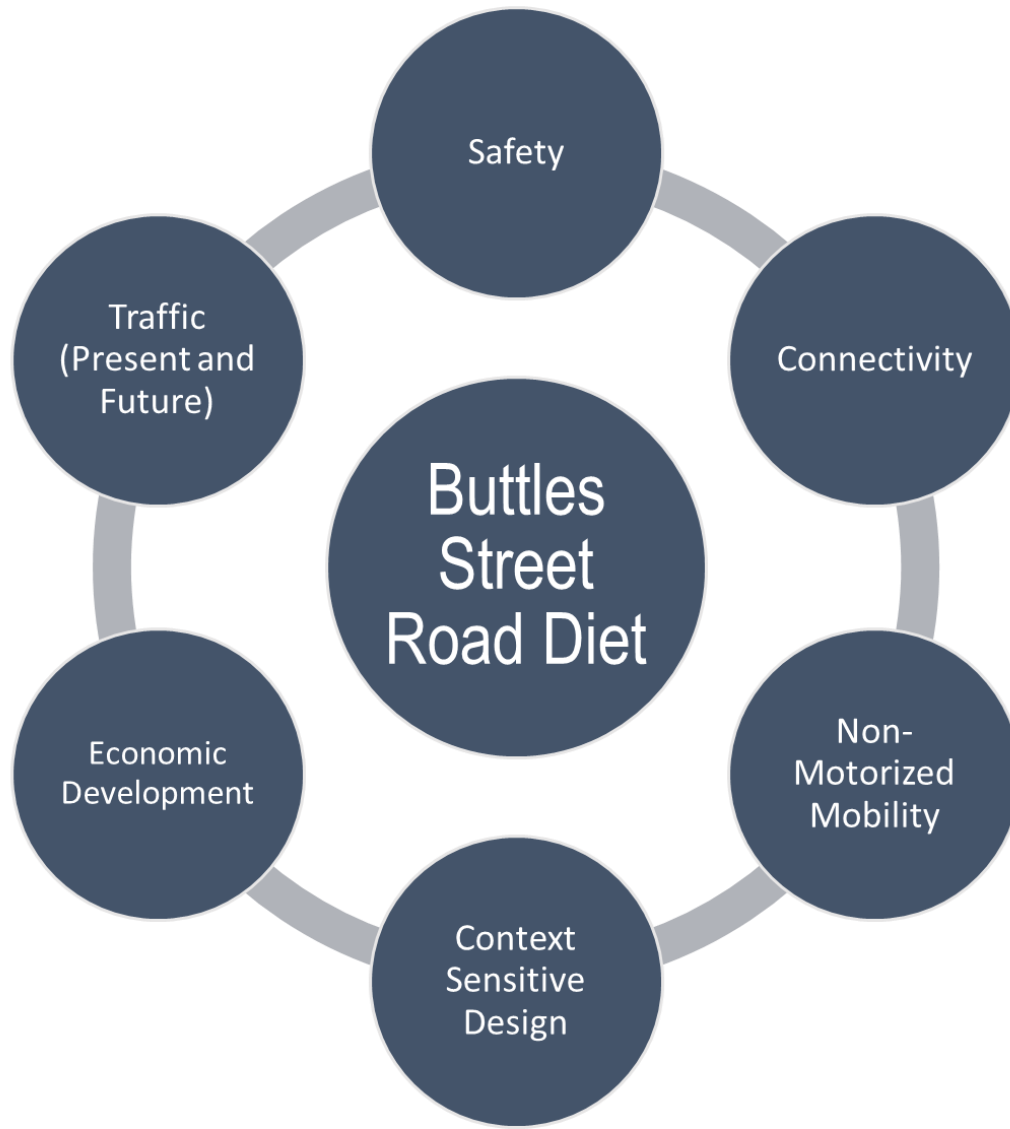
# Buttles Street Road Diet Traffic Data Update

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- In 2015 MDOT commissioned a corridor study of US-10 BR through City of Midland
  - Washington Street to US-10 BR/US-10 Interchange
- Partnership with the City
- Corridor Study presented to City Council March 27, 2017
  - Preferred Alternative – Road Diet (reduce to two travel lanes)

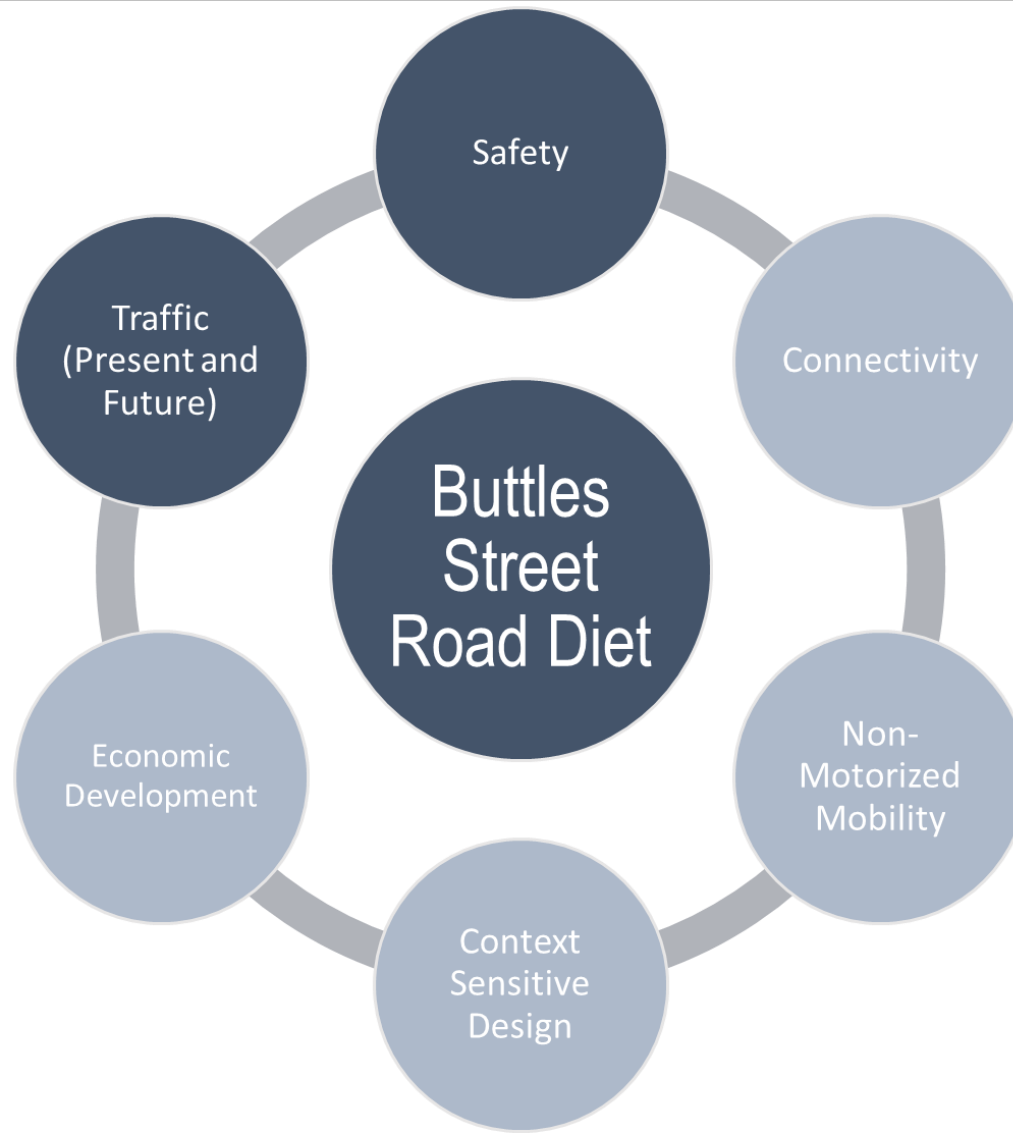
# Buttles Street Road Diet Traffic Data Update

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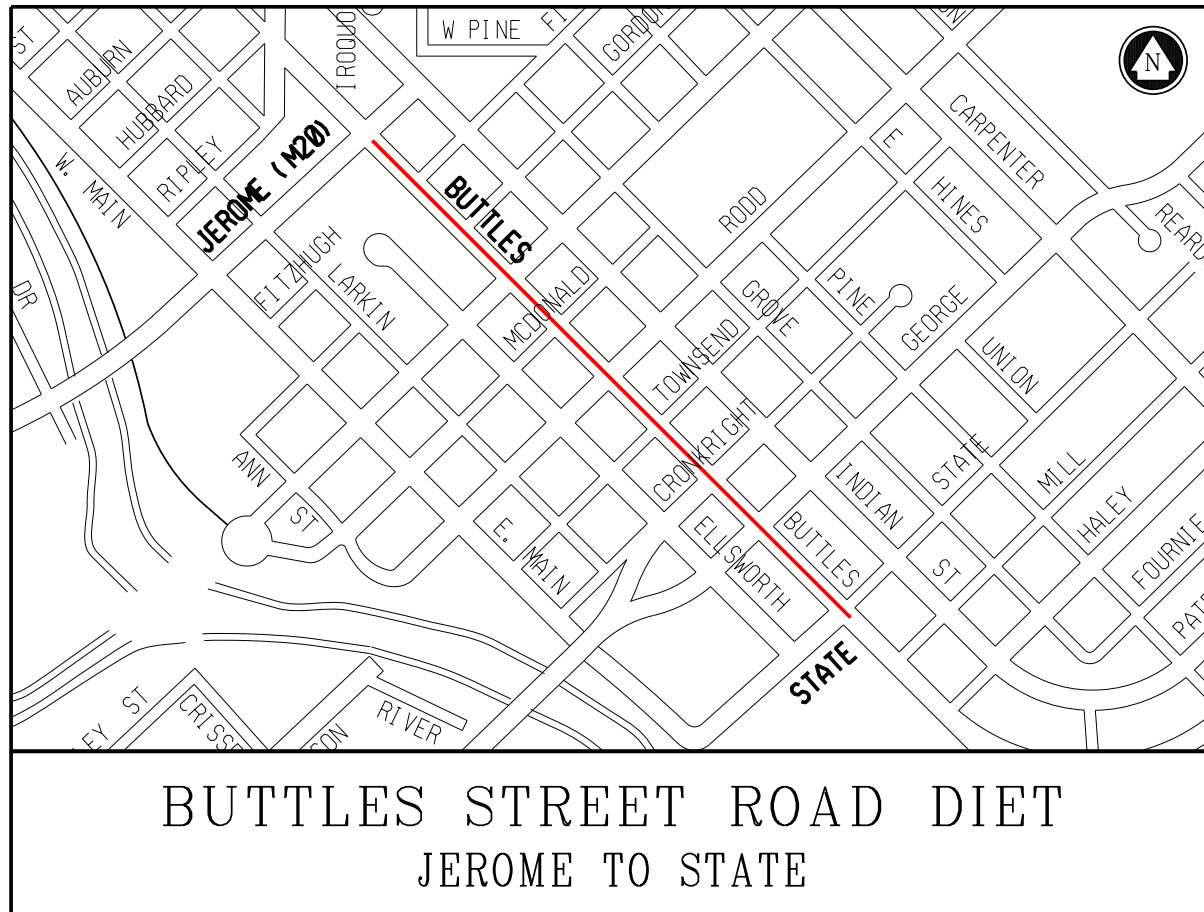


# Buttles Street Road Diet Traffic Data Update

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# Buttles Street Road Diet Traffic Data Update



# Buttles Street Road Diet Traffic Data Update

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- Traffic data previously collected and reported includes two short term assessments of a lane reduction on Buttles Street
  - August 28-30, 2017
  - November 6-13, 2017
    - Data collected included volume and speed during peak travel times
    - Reviewed for backup and delay at signalized intersections

# Buttles Street Road Diet Traffic Data Update

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- Traffic data from the short term assessments presented to City Council on December 18, 2017
- A long term trial period was implemented to assess the lane reduction on Buttles Street
  - Assessment includes traffic data collection
    - Volume, speeds, delay and crashes

# Buttles Street Road Diet Traffic Data Update

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Long term trial period of road diet -

- May 14, 2018 traffic bollards and pavement markings were installed on Buttles Street, reducing the three lane road section to two lanes
- Previous update on traffic data was presented October 29, 2018
- Additional traffic data has been collected since that time



# Buttles Street Road Diet Traffic Data Update

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Long term trial period of road diet -

- Representatives from the Michigan Department of Transportation (MDOT) are here to present an update to the traffic data collected since the October 2018 report on traffic

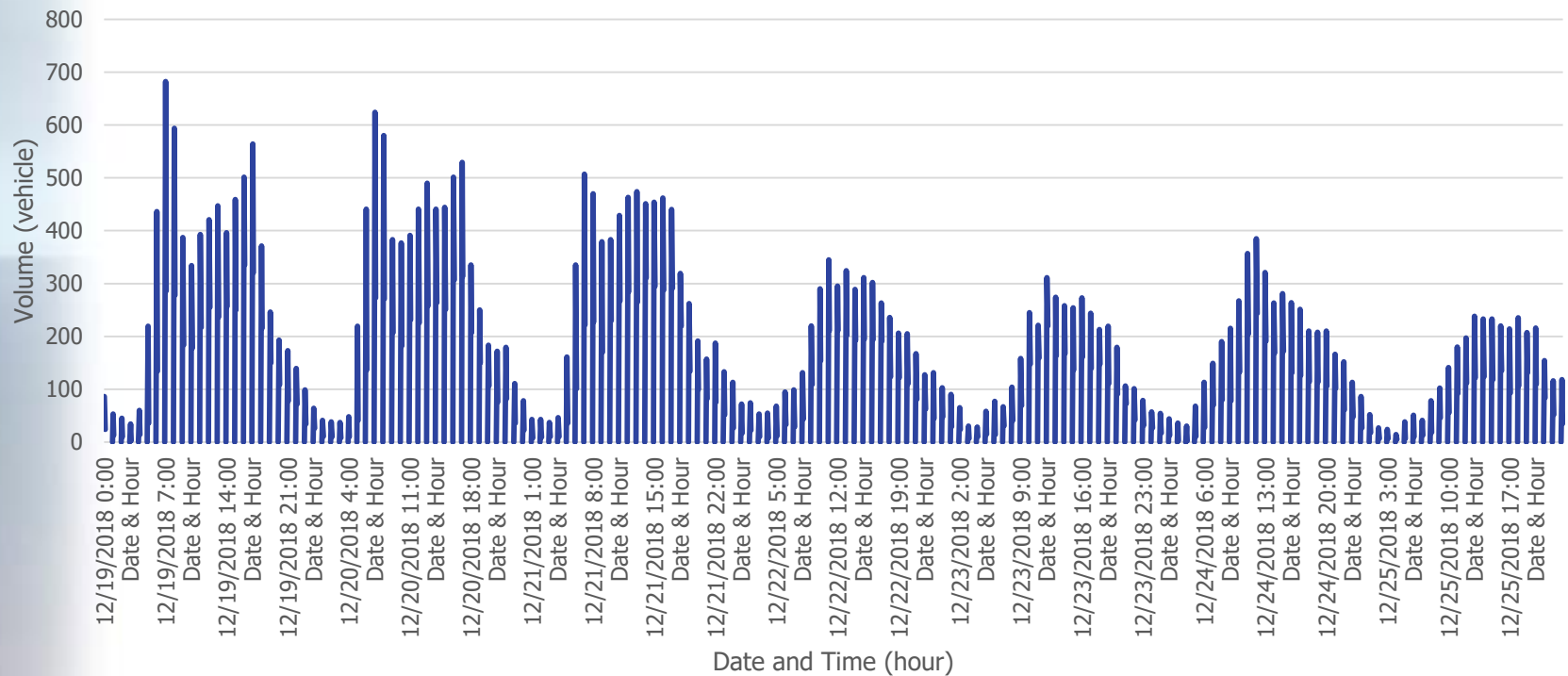
# Buttles Street Road Diet Traffic Data Update

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- Traffic data collected
  - Volume
  - Speed
  - Delay Study
  - Crash information

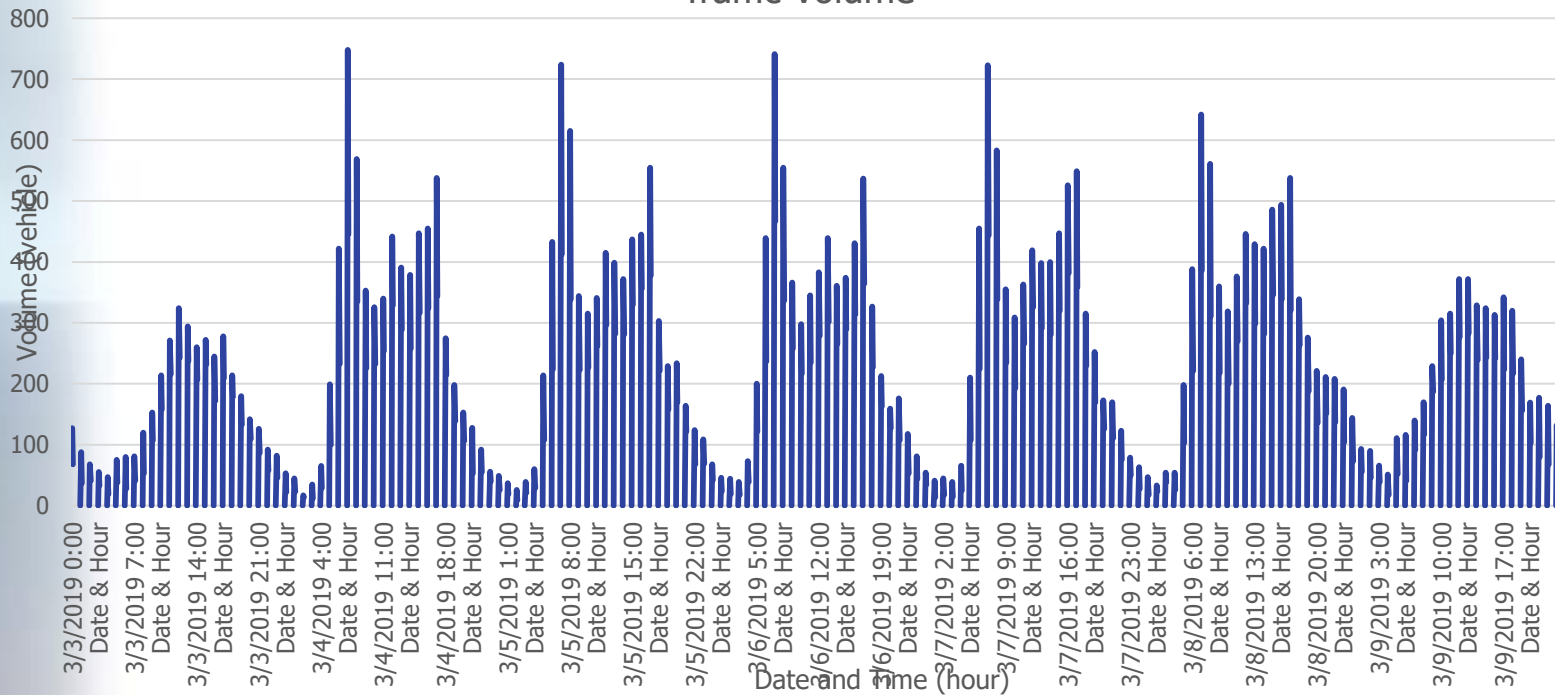
# Buttles Street Road Diet Traffic Data Update

Buttles Street at State Street  
December 19 through December 25, 2018  
Traffic Volume



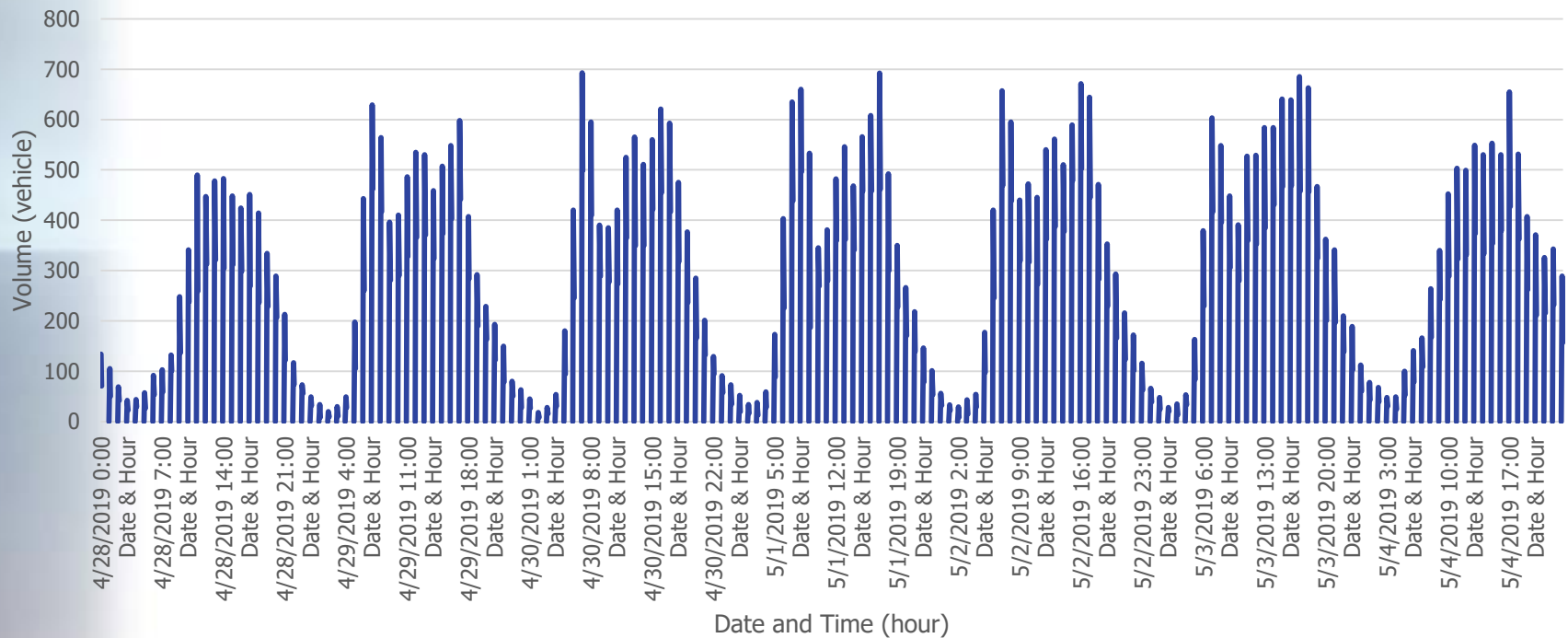
# Buttles Street Road Diet Traffic Data Update

Buttles Street at State Street  
March 3 through March 9, 2019  
Traffic Volume



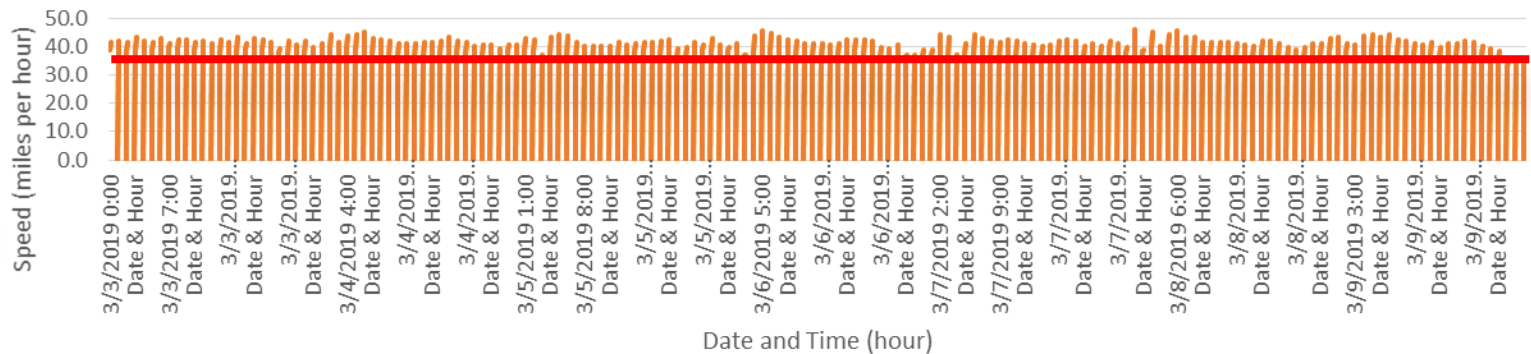
# Buttles Street Road Diet Traffic Data Update

Buttles Street at Fitzhugh Street  
April 28 through May 4, 2019  
Traffic Volume

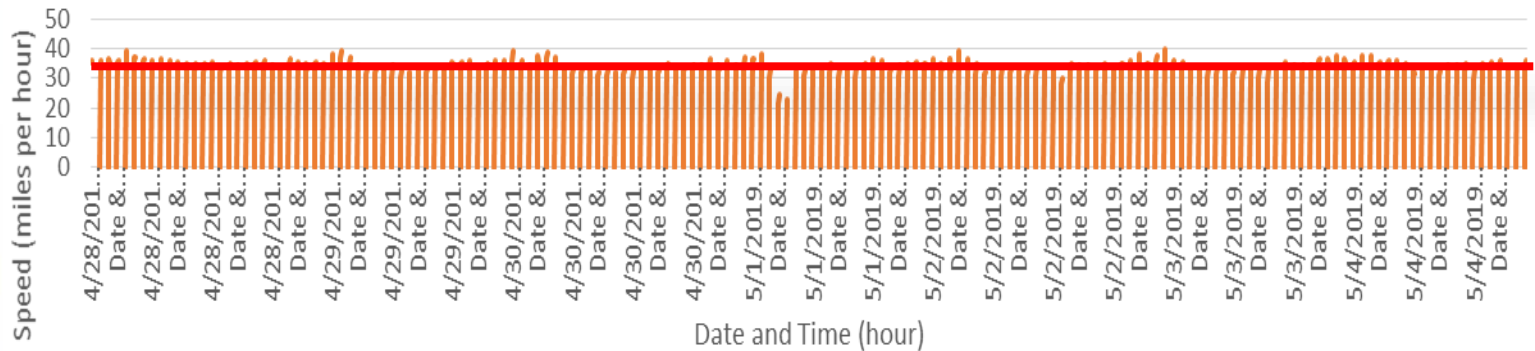


# Buttles Street Road Diet Traffic Data Update

Buttles at State Average Vehicle Speed



Average Vehicle Speed



# Buttles Street Road Diet Traffic Data Update

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- Delay Study
  - Vehicle delay data was collected May 7 and May 8, 2019
  - Delay study identifies the number of vehicles that are delayed at a signalized intersection for more than one cycle of the signal
  - During the May 2019 delay study, no vehicle delays were identified
  - This is consistent with the September 2018 and November 2017 delay studies

# Buttles Street Road Diet Traffic Data Update

Buttles St Crash Data - 5/14/2018 to 4/16/2019



- Crash locations  
May 2018  
– May  
2019



# Buttles Street Road Diet Traffic Data Update

Buttles St Crash Data - 5/14/2018 to 4/16/2019



- Crash locations May 2018 – May 2019

# Buttles Street Road Diet Traffic Data Update

## Crash by Type

		Angle Driveway	Angle Straight	Angle Turn	Bicycle	Fixed Object	Misc. Multiple Vehicle	Misc. Single Vehicle	Parking	Rear End Driveway	Rear End Left Turn	Rear End Straight	Side Swipe Same	Total
May 2009 to May 2010		11	3								1	6	21	
May 2010 to May 2011	1	10	3								1	6	21	
May 2011 to May 2012		13			2	2				1	2	8	28	
May 2012 to May 2013	1	15	2								4	4	26	
May 2013 to May 2014		11	2			1		1		1	3	7	26	
May 2014 to May 2015		11	1			2					1	2	17	
May 2015 to May 2016		9				2		1			3	9	24	
May 2016 to May 2017		7	1			2					2	6	18	
May 2017 to May 2018		10		1		5					3	7	26	
May 2018 to May 2019		17				3	2		1	1	5	8	37	

# Buttles Street Road Diet Traffic Data Update

## Crash by Type

	Angle Driveway	Angle Straight	Angle Turn	Bicycle	Fixed Object	Misc. Multiple Vehicle	Misc. Single Vehicle	Parking	Rear End Driveway	Rear End Left Turn	Rear End Straight	Side Swipe	Same
May 2009 to May 2010		52%	14%								5%	29%	
May 2010 to May 2011	5%	48%	14%								5%	29%	
May 2011 to May 2012		46%			7%	7%				4%	7%	29%	
May 2012 to May 2013	4%	58%	8%								15%	15%	
May 2013 to May 2014		42%	8%			4%		4%		4%	12%	27%	
May 2014 to May 2015		65%	6%			12%					6%	12%	
May 2015 to May 2016		38%				8%		4%			13%	38%	
May 2016 to May 2017		39%	6%			11%					11%	33%	
May 2017 to May 2018		38%		4%		19%					12%	27%	
May 2018 to May 2019		46%				8%	5%		3%	3%	14%	22%	

# Buttles Street Road Diet Traffic Data Update

## Crash by Driver Violation

	Careless or Negligent	Disobeyed TCD	Drove Wrong Way	Fail to Stop ACD	Failed to Yield	Improper Lane Use	Improper Turn	Other	Speed Too Fast	Ran Red Light
May 2009 to May 2010		8	1		3	5	1	2		7
May 2010 to May 2011		7		1	3	5	3			7
May 2011 to May 2012	1	11		3	3	4	2		1	13
May 2012 to May 2013		10	1	4	7	1	1			11
May 2013 to May 2014		6		4	9	3	3			7
May 2014 to May 2015		9		2	2	1	2			10
May 2015 to May 2016		5		4	5	3	4			8
May 2016 to May 2017		5		3	4	2	3			6
May 2017 to May 2018		9		1	3	4	6	1	1	10
May 2018 to May 2019		12		6	6	1	2	1		17

# Buttles Street Road Diet Traffic Data Update

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## Long Term Trial Period:

- Traffic data including volume, speed and delay information collected since the last update are consistent with previous traffic data
- Anticipate collecting additional traffic data after the M-20 bridge construction is complete
- Angle-Straight crashes have increased, Working with MPD to specifically look at red light running

# Buttles Street Road Diet Traffic Data Update

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Long Term Trial Period:

- The next assessment of the traffic data will be presented in spring 2020
- Resolution before you receives and files the Traffic Data Update for the lane reduction on Buttles Street

# End